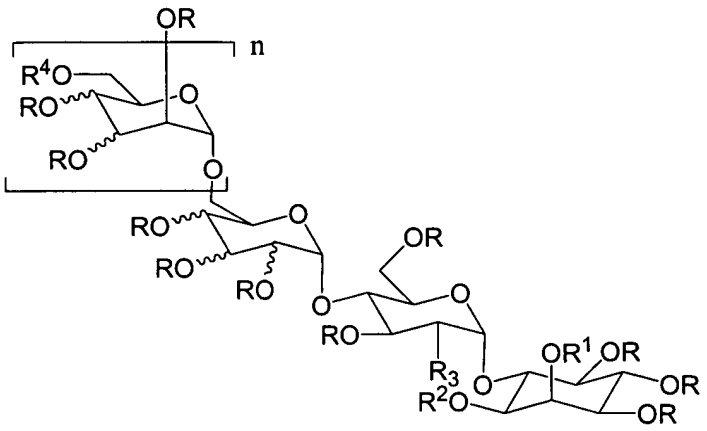
*In the claims:*

1. **(original)** A compound represented by formula **I**:




**I**

wherein,

n is 1-4;

R represents independently for each occurrence H, alkyl, aryl, -$CH_2$-aryl, -C(O)-alkyl, -C(O)-aryl, or -Si(alkyl)$_3$;

$R^1$ and $R^2$ are independently H, -$CH_2$-aryl, -C(O)-alkyl, -C(O)-aryl, -Si(alkyl)$_3$; or $R^1$ and $R^2$ taken together are $C(CH_3)_2$, P(O)OH, or $P(O)OR^5$;

$R^3$ is amino, -$N_3$, or -$NH_3X$;

$R^4$ represents independently for each occurrence H, alkyl, aryl, -$CH_2$-aryl, -C(O)-alkyl, -C(O)-aryl, -Si(alkyl)$_3$, or -$P(O)(OR^5)_2$;

$R^5$ represents independently for each occurrence H, $Li^+$, $Li^+$, $Na^+$, $K^+$, $Rb^+$, $Cs^+$, aryl, or an optionally substituted alkyl group; and

X is a halogen, alkyl carboxylate, or aryl carboxylate.

2. **(original)** The compound of claim 1, wherein n is 1, 2, or 3.

3. **(original)** The compound of claim 1, wherein n is 3.

4. (**original**) The compound of claim 1, wherein R is H.

5. (**original**) The compound of claim 1, wherein $R^1$ and $R^2$ taken together are $P(O)OR^5$.

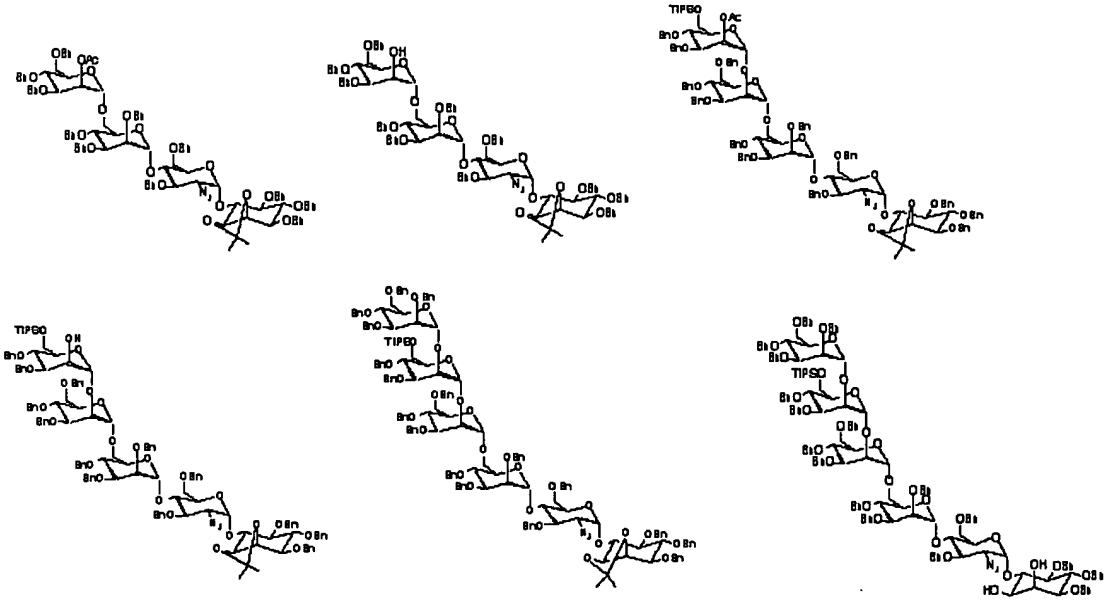
6. (**original**) The compound of claim 1, wherein $R^3$ is $N_3$.

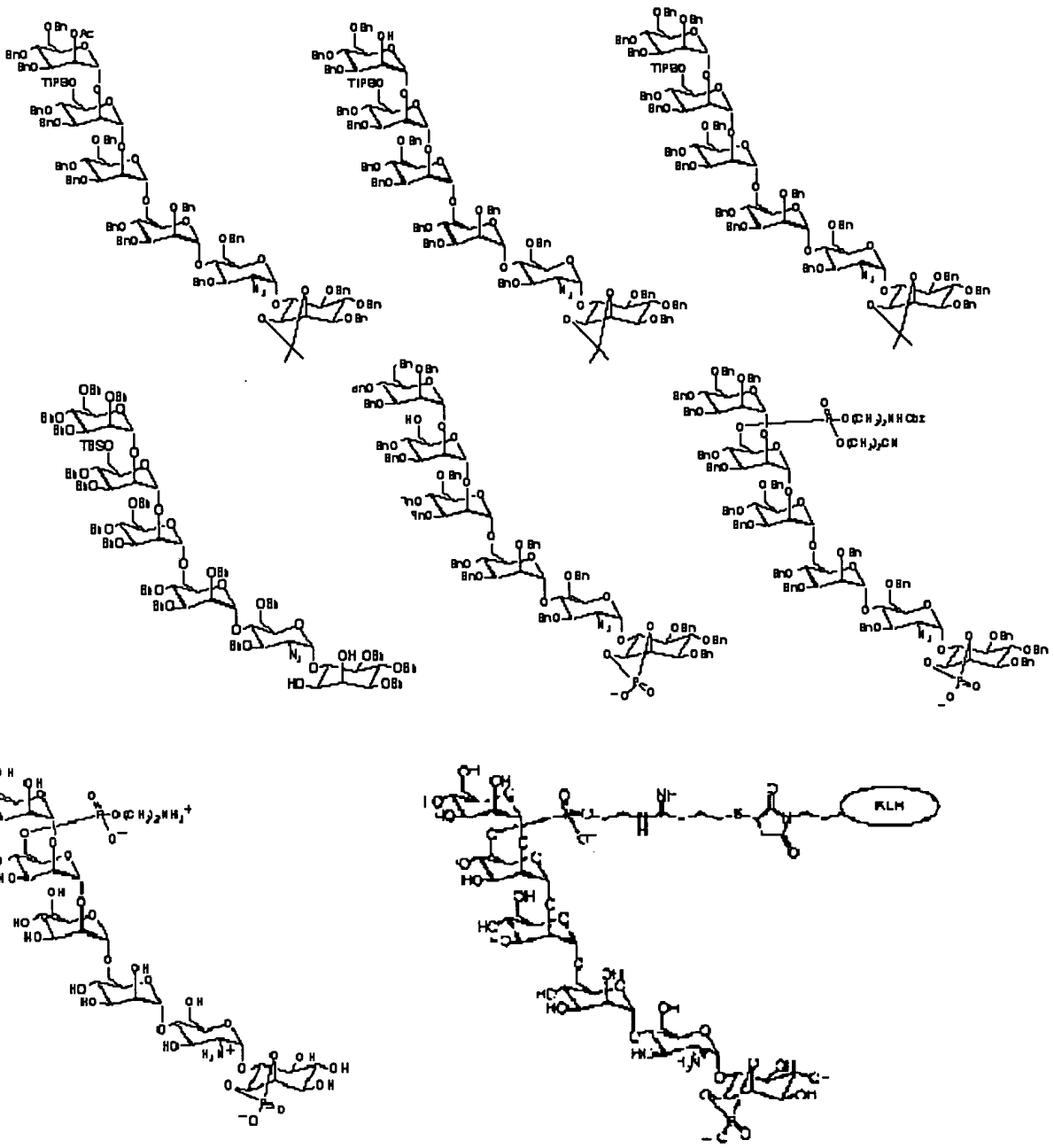
7. (**original**) The compound of claim 1, wherein $R^3$ is $-NH_3X$.

8. (**original**) The compound of claim 1, wherein $R^4$ represents independently for each occurrence H, $-CH_2Ph$, or $-Si(alkyl)_3$;

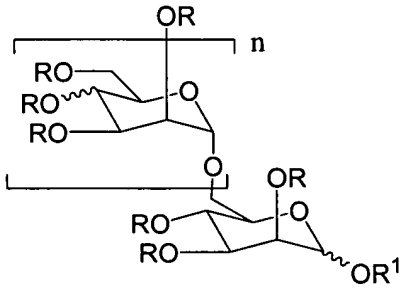
9. (**original**) The compound of claim 1, wherein $R^4$ represents independently for each occurrence H, $-CH_2Ph$, -or $P(O)OR^5$; and $R^5$ is an optionally substituted alkyl group.

10. (**original**) The compound of claim 1, wherein said compound of formula **I** is selected from the group consisting of:





11. (**original**) A compound represented by formula **II**:




**II**

wherein,

n is 1-4;

R represents independently for each occurrence H, alkyl, aryl, -$CH_2$-aryl, -C(O)-alkyl, -C(O)-aryl, or -Si(alkyl)$_3$;

$R^1$ is -$(CH_2)_mCH{=}CH_2$ or trichloroacetimidate; and

m is 1-6.

12. (**original**) The compound of claim 11, wherein n is 2 or 3.

13. (**original**) The compound of claim 11, wherein n is 3.

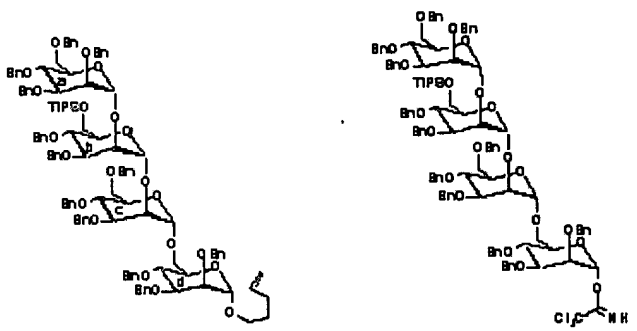
14. (**original**) The compound of claim 11, wherein m is 3.

15. (**original**) The compound of claim 11, wherein R represents independently for each occurrence -$CH_2$-aryl or -Si(alkyl)$_3$.

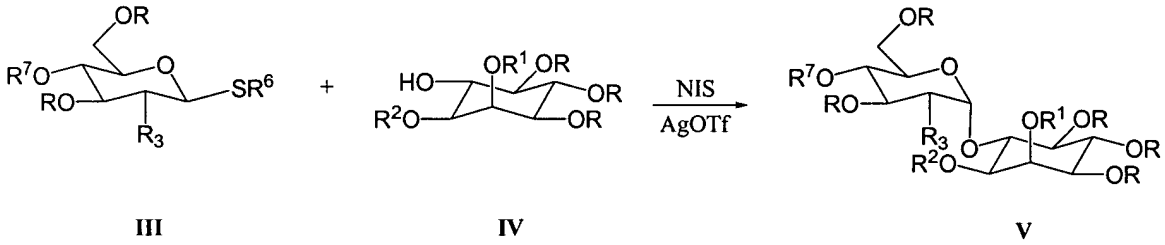
16. (**original**) The compound of claim 11, wherein R represents independently for each occurrence benzyl or -Si(iPr)$_3$.

17. (**original**) The compound of claim 11, wherein $R^1$ is trichloroacetimidate and R represents independently for each occurrence benzyl or -Si(iPr)$_3$. and

18. (**original**) The compound of claim 11, wherein said compound of formula **II** is selected from the group consisting of:



19. **(original)** A method of preparing glycosylphosphatidylinositol glycans as depicted in Scheme 5:




III IV V

**Scheme 5**

wherein,

R represents independently for each occurrence H, alkyl, aryl, -$CH_2$-aryl, -C(O)-alkyl, -C(O)-aryl, or -Si(alkyl)$_3$;

$R^1$ and $R^2$ are independently H, -$CH_2$-aryl, -C(O)-alkyl, -C(O)-aryl, -Si(alkyl)$_3$; or $R^1$ and $R^2$ taken together are $C(CH_3)_2$, P(O)OH, or P(O)$OR^5$;

$R^3$ is amino, -$N_3$, or -$NH_3X$;

$R^5$ represents independently for each occurrence H, $Li^+$, $Li^+$, $Na^+$, $K^+$, $Rb^+$, $Cs^+$, aryl, or an optionally substituted alkyl group;

$R^6$ is alkyl or aryl;

$R^7$ is alkyl, aryl, -$CH_2$-aryl, -C(O)-alkyl, -C(O)-aryl, or -Si(alkyl)$_3$; and

X is a halogen, alkyl carboxylate, or aryl carboxylate.

20. (**original**) The method of claim 19, wherein R is -$CH_2$-aryl.

21. (**original**) The method of claim 19, wherein $R^1$ and $R^2$ taken together are $C(CH_3)_2$.

22. (**original**) The method of claim 19, wherein $R^3$ is -$N_3$.

23. (**original**) The method of claim 19, wherein $R^6$ is alkyl.

24. (**original**) The method of claim 19, wherein $R^7$ is -C(O)-alkyl.

25. (**original**) The method of claim 19, wherein R is benzyl, $R^1$ and $R^2$ taken together are $C(CH_3)_2$, and $R^3$ is -$N_3$.

26. (**original**) The method of claim 19, wherein R is benzyl, $R^1$ and $R^2$ taken together are $C(CH_3)_2$, $R^3$ is -$N_3$, and $R^6$ is ethyl.

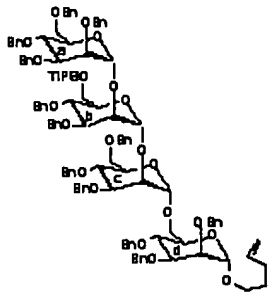
27. (**original**) A method of preparing glycosylphosphatidylinositol glycans, comprising the steps of:

binding a mannopyranoside to a solid support to provide a first substrate, reacting said first substrate with a mannopyranose trichloroacetimidate to give a disaccharide bound to said solid support, reacting said disaccharide with a mannopyranose trichloroacetimidate to give a triisaccharide bound to said solid support, reacting said trisaccharide with a mannopyranose trichloroacetimidate to give a tetrasaccharide bound to said solid support, and cleaving said tetrasaccharide from said solid support.

28. (**original**) The method of claim 27, wherein said mannopyranoside is bound to said solid support through a glycosidic linkage.

29. (**original**) The method of claim 27, wherein said tetrasaccharide is cleaved from said solid support using Grubbs' catalyst.

30. (**original**) The method of claim 27, wherein said tetrasaccharide is represented by formula **VI**:



**VI**